# littleBits™
BITCRAFT:
GETTING STARTED

SETTING UP THE MOD

IN ORDER TO SIMPLIFY THE SET-UP PROCESS, we've made the bitCraft mod available on a platform designed to make modding Minecraft simple, called Technic Launcher. In order to get started, first download Technic Launcher. Run the launcher, and log in with your Minecraft account. Once you're in, click the "Modpacks" tab at the top of the window, and search for "littleBits bitCraft". You should see the bitCraft mod appear! Click "Install" in the lower-right corner, and then "Play".

NEXT, set up a circuit like the one below. You don't have to use a slide dimmer or bargraph specifically. Buttons, pressure sensors, LEDs, etc. all work well. **GET CREATIVE AND TRY EVERYTHING!**
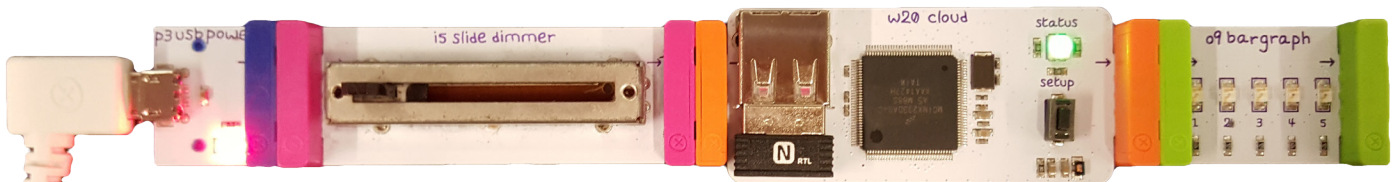
Wait until your cloudBit connects to the internet (the status light will be a steady green) before continuing. It may help to put shoes on your circuit to make sure it all stays snapped together so the cloudBit doesn't lose power.

WELCOME ROOM - INTRODUCING THE CLOUD GATEWAY!

If you've just finished installing the mod, you should already have Minecraft open. If not, open Technic Launcher and run the bitCraft modpack. There is a saved world included with the mod called "Welcome to bitCraft" with demos already set up for you to test. Open the world and prepare for awesome.

YOU SHOULD BE IN A ROOM THAT LOOKS LIKE THIS:

The block in front of you, the Cloud Gateway, is added by the bitCraft mod. In fact, it is the only item added by the mod, and is the single block you will use to connect Minecraft with littleBits. There are several parts you will want to remember for the future:

1. BITSNAP
This is where redstone connects to the block. Always connect your redstone circuit at this end of the Cloud Gateway.
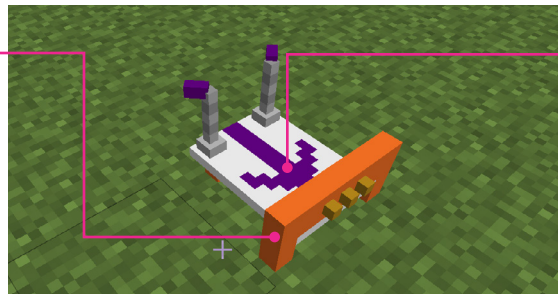
2. ARROW
This shows which direction redstone is flowing for the block. If the arrow is pointing towards the bitSnap into your redstone circuit, it's receiving signal from your cloudBit into Minecraft. If the arrow is pointing away from the bitSnap out from your redstone circuit, it's transmitting redstone from Minecraft to your cloudBit.

The following rooms will show you how to craft the Cloud Gateway and connect it to your cloudBit.

CRAFTING CLOUD GATEWAY

ROOM 1 – CRAFTING THE CLOUD GATEWAY

In the chest are all the items you need to craft a Cloud Gateway: wool, some redstone dust, and an iron ingot. They are arranged in the chest in the shape of the crafting recipe (shown left).

TRY CRAFTING A FEW CLOUD GATEWAYS NOW. You'll need at least two Cloud Gateways to complete the tutorial, but you may want more to experiment with. Once you're done, head to the next room.

ROOM 2 – CONNECTING THE CLOUD GATEWAY TO YOUR CLOUDBIT

Now that you've crafted the new block, let's put it to use! Place the block by holding it in your hand, and right-clicking on the floor. It will be placed on the floor, facing away from you (similar to the redstone repeater). Try placing the block so it's connected to the pressure plate in the room, like this:
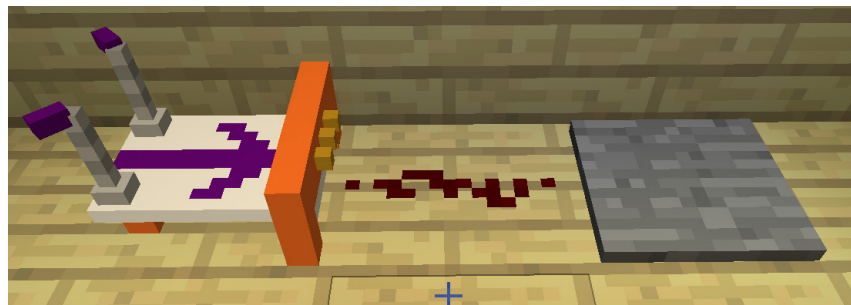
ONCE IT'S PLACED, right-click the Cloud Gateway on the floor. This will open up a window which will help you connect.

CONNECTING YOUR CLOUDBIT

SIGN IN

Email

Password

☐ Remember me

SIGN IN

Forgot your Password?

or

f Sign in with Facebook

We will never post anything on Facebook without your permission

Don't have an account? Create an account

Click the button below to connect to your cloudBit. This will launch a browser and ask you to log into your littleBits account.
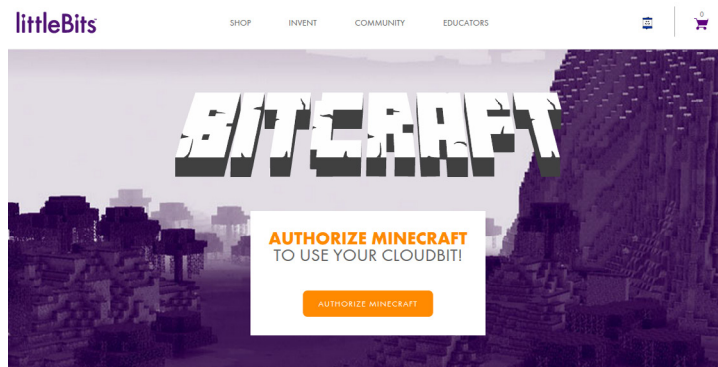
Connect

FIRST, click the "connect" button in the block window. This will open a page in your web browser.
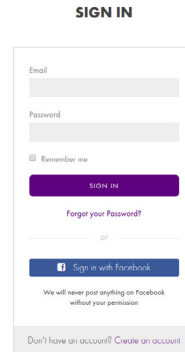
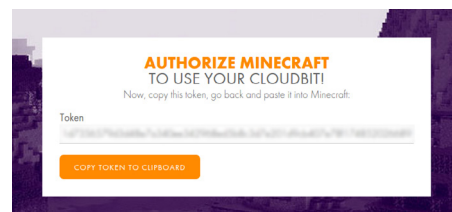You may be asked to first log in to your littleBits account.

Once you've logged in (or if you're already logged in), you'll see a big "Authorize Minecraft" button.

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BITCRAFT

AUTHORIZE MINECRAFT TO USE YOUR CLOUDBIT!

AUTHORIZE MINECRAFT

Click it to connect your cloudBit to the game. You should see "Success!" Your cloudBit has been connected! Now you can close your browser window and go back to Minecraft.

YAY, SUCCESS!
Your work here is done!
Now go back to Minecraft and play!
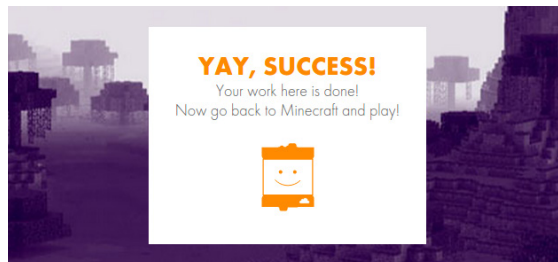
NOTE: in some cases, you may be asked to copy and paste a token into the game. Just click the "Copy to Clipboard" button, and then in Minecraft, click the "Paste Token" button.

AUTHORIZE MINECRAFT TO USE YOUR CLOUDBIT!
Now, copy this token, go back and paste it into Minecraft:

Token

COPY TOKEN TO CLIPBOARD

Follow the instructions in the browser to connect to your cloudBit.

Paste Token

TRANSMITTING REDSTONE

FINALLY, YOU'LL SEE THREE BUTTONS:

1. The name of your cloudBit
2. Whether the Cloud Gateway is transmitting or receiving, and
3. A reset button. For now, click the "Device" button until the name of the cloudBit you want to use is displayed. Then, click the "Direction" button until is says "Transmit".

Press ESC on your keyboard to leave the setup window. After a brief moment, you should see the purple arrow on the block turn green, to indicate that it is connected to your cloudBit. The arrow will also change direction to point away from the orange bitSnap.

Now try it out! Step on the pressure plate in front of the block (I had a pig help me in the image below).
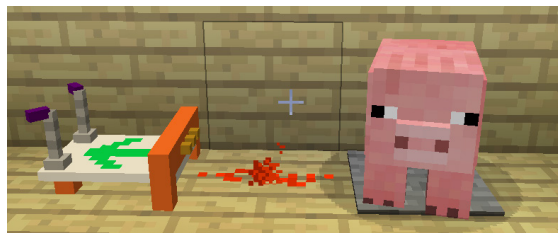
When you do, the bargraph connected to **YOUR CLOUDBIT SHOULD LIGHT UP.** When you're done, move to the next room.
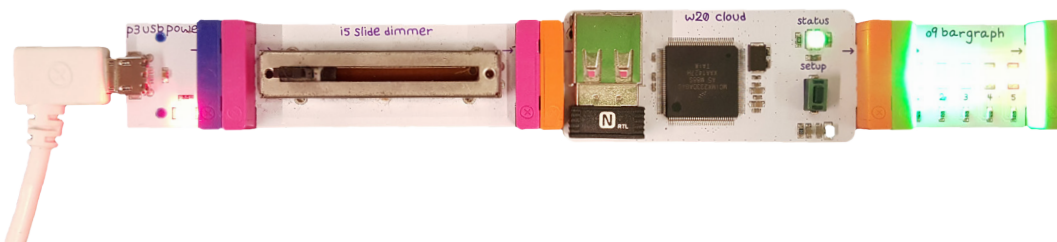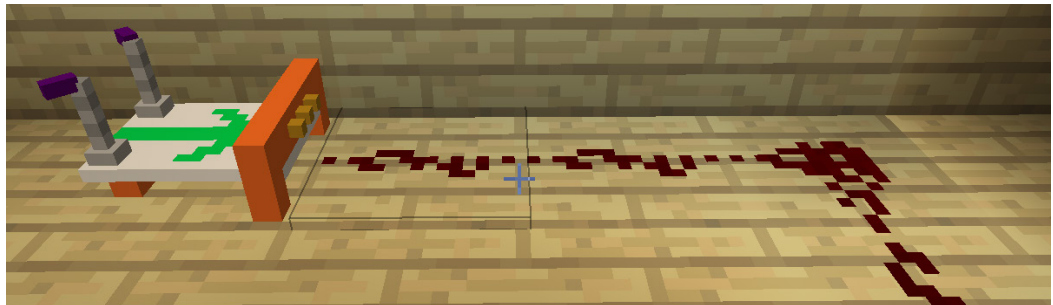
ROOM 3 - USE YOUR CLOUDBIT TO ESCAPE THE ROOM.

Oh no, there's a big iron door at the end of this room! Let's see if we can use the Cloud Gateway to send redstone to the iron door so we can escape. Place a Cloud Gateway on the floor so it connects with the redstone dust, like this:

YOU'LL NOTICE SHORTLY AFTER YOU PLACE IT, the Cloud Gateway will automatically connect (the arrow will turn green). Once you configure one of the blocks, your settings will be remembered and automatically applied when you place another one. Nice!

THOUGH, IN THIS CASE, we don't want to transmit redstone from Minecraft. Instead, we want to receive redstone from the cloudBit. To change the direction, right-clight the Cloud Gateway. The window will open to the same window you saw before (without having to go through the connection process again). Click the "Direction" button until it says "Receive". Then, press ESC. You should see the arrow on your block change so it's pointing towards the redstone on the floor.
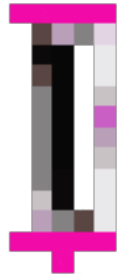
ENTER BITCRAFT

Slide the slide dimmer in front of your cloudBit to the right. Voila, the iron door opens! Congrats, you're now well-equipped to experiment with bitCraft.
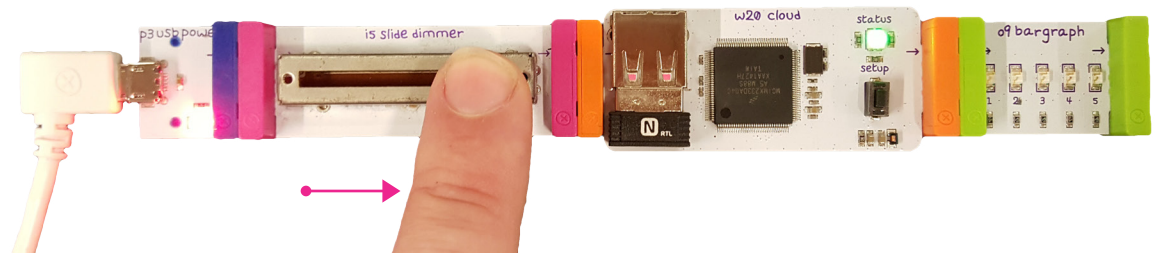
Just beyond the door are several demo projects which you can try out. Right-click the blocks to configure them, just like the tutorial.

NOW, GET OUT THERE AND HAVE A BLASSSSSSST!